

PATENT CLAIMS

1. Device (3, 4, 48, 52, 75, 86) for wrapping bodies, especially bales (1, 49, 64, 80) of harvested agricultural produce from hay, straw or wilting green crop with a film (2), wherein means (13, 32, 35, 83) are provided for attaching an identification such as a label (15, 45, 62, 66, 77) or a print on, at, in or below the film (2) covering the bale.
2. Device in accordance with claim 1, wherein the label (15, 45, 62, 66, 77) is a self-adhesive label.
3. Device in accordance with claim 1 or 2, wherein the means (13, 35) comprise a label dispensing unit (16, 40, 59, 65) and a pressing element (17, 72, 73).
4. Device in accordance with one of the claims 1 through 3, wherein the means (13, 83) are arranged on a rotary arm (3) that circles the bale (1).
5. Device in accordance with one of the claims 1 through 3, wherein the means (13, 83) are arranged on a rotating wrapping table (52, 75, 86).
6. Device in accordance with claim 4 or 5, wherein the means (13, 83) are arranged after a film stretching device (11).
7. Device in accordance with one of the claims 1 through 3, wherein the means (13, 83) are arranged on the stand (60, 71) in an articulating manner.
8. Device in accordance with one of the claims 1 through 3, wherein the means (13, 83) are directly or indirectly coupled with a film cutting-and-clamping device (76, 81).
9. Device in accordance with one of the claims 1 through 3, wherein the means (13, 83) are directly or indirectly coupled with a bale discharge device.

10. Device in accordance with one or several of the previous claims, characterized by drive means (26, 36) for moving the label dispensing unit (16, 40, 59, 65) and/or the pressing element (17, 72, 73, 83) back and forth against the film surface of the wrapped bale (1, 49, 64, 80).
11. Device in accordance with one or several of the previous claims, wherein detachment of the label (15, 45) from a label tape occurs directly or indirectly by the rotating bale (1, 37).
12. Device in accordance with one or several of the previous claims, wherein the label (15, 45, 62, 66, 77) is pulled from a label tape (21, 46) by mechanical (24, 28), electric (35), hydraulic (26) and/or pneumatic auxiliary drives or by a drive source from the tractor.
13. Device in accordance with one or several of the previous claims, wherein means are provided for individually imprinting the labels with symbols, marks or electronically captured data.
14. Device in accordance with one of the claims 1 through 13, wherein the label dispensing unit (16, 40, 59, 65) is equipped with a mechanical or electronic pressing device.
15. Device in accordance with one of the claims 1 through 12, wherein means (83) are provided for individually imprinting the film (82) that is wrapped around the bale (80) with symbols, marks or electronically captured data.
16. Device in accordance with one or several of the previous claims, wherein the location where the identification is supposed to be attached on the film (2) can be pre-set by a control and/or operating unit (35).

17. Device in accordance with one or several of the previous claims, characterized by a sensor (32) that determines the degree to which the bale (1, 49, 64, 80) is wrapped with film (2) and/or the respective bale, rotary arm or rotating table position or with a sensor that records the number of bale revolutions or the length of film that has been pulled off the dispensing reel (5).
18. Method for wrapping bodies, especially bales of harvested agricultural produce from hay, straw or wilting green crop with a film in a device in accordance with one or several of the previous claims, wherein the means (13, 35, 83) that are provided for attaching an identification are controlled in dependence on the degree to which the bale (1, 49, 64, 80) is wrapped with the film.
19. Method for wrapping bodies in accordance with claim 18, wherein the means (13, 35, 83) that are provided for attaching an identification are controlled in dependence on the bale, rotary arm or wrapping table position, the length of film that has been pulled off or the number of bale revolutions in order to place the identification in the desired location.
20. Method for wrapping bodies in accordance with claim 18 or 19, wherein the means (13, 35, 83) that are provided for attaching an identification are controlled directly or indirectly by being coupled with the movement of a cutting-and-clamping device (76, 81) for the film that is wrapping around the bale (1, 49, 64, 80).
21. Method for wrapping bodies in a device in accordance with one or several of the claims 1 through 17, wherein the means (13, 35, 83) that are provided for attaching an identification are controlled in dependence on a bale discharge device.
22. Method for wrapping bodies in accordance with claims 18 through 21, wherein the identification (15, 45, 62, 66) is attached during the rotation of the bale (1, 49, 64).

23. Method for wrapping bodies in accordance with claims 18 through 21, wherein the identification is attached while the bale (64, 80) is resting, particularly by imprinting the film (82) e.g. with an ink-jet printer (83) or electronic printers.
24. Method for wrapping bodies in accordance with claim 18, wherein a white or nearly transparent film is used and the label is placed underneath one of the last film layers.
25. Method for wrapping bodies in accordance with claims 18 through 23, wherein a self-adhesive label is attached in such a way that it also serves the purpose of fastening the film end of the film underneath.
26. Method for wrapping bodies in accordance with one of the claims 18 through 25, wherein adhesive is applied or activated not until the label is placed on the film.
27. Method for wrapping bodies in accordance with one or several of the claims 18 through 25, wherein a pre-printed self-adhesive label or an imprinted self-adhesive film is used.
28. Method for wrapping bodies in accordance with claim 27, wherein the pre-printed or blank label can additionally be imprinted or labeled separately.
29. Method for wrapping bodies in accordance with claim 28, wherein the wrapped bale controls the individual printing itself in dependence on changing parameters that relate to the bale, e.g. bale weight.
30. Method for wrapping bodies in accordance with claim 29, wherein the identification and/or individual imprint of the label can be remote controlled and recognized by electronic data recording systems.

31. Method for wrapping bodies in accordance with one or several of the previous claims, wherein the bale is equipped with electronic identifications such as chips or transponders, with which the bale can be located.

32. Method for wrapping bodies in accordance with claim 31, wherein the electronic identification of the bale occurs while employing the satellite navigation system GPS or DGPS.

add
to
ADP
C17